

**DRAFT Data Assessment Team (DAT) Conference Call Notes**  
**5/2/13 at 11:00 a.m.**

Participants: Lucinda Shih (CCWD), Geir Aasen (DFW), Andy Chu, Edmund Yu, Elaine Jeu and Wenli Yin (DWR), Elizabeth Leeper (KMTG on behalf of SLDMWA), Craig Anderson, Jon Speegle and Leigh Bartoo (FWS), RG Fernando (MWD), Barb Byrne (NMFS)

**Sacramento River Salmonid Monitoring**

Preliminary Rotary Screw Trap (RST) Report			
Species*	FWS Red Bluff Diversion Dam RST (Estimated Passage)	DFW Tisdale Weir RST (Catch)	DFW Knights Landing RST (Catch)
Date	No new biweekly data.	4/25/13 to 4/30/13**	Monitoring discontinued since 12/15/12.
CHNF		582	
CHNLF			
CHNW			
CHNS		2	
Ad-Clipped CHN		165	
SH			
Ad-Clipped SH			
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead. Species are unmarked unless noted as adipose-fin clipped (ad-clipped). Data subject to revision.			

\*\*There was a huge increase in unmarked fall-run Chinook salmon catch and in ad-clipped Chinook salmon catch since the last DAT conference call. The large number of ad-clipped Chinook salmon catch is mostly likely from the 2012 brood year fall-run Chinook salmon hatchery releases from the Coleman National Fish Hatchery that occurred in April at Battle Creek.

Graphical summaries of the monitoring data collected at the Sacramento River and at other locations can be found at <http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>. In addition, the biweekly passage reports of juvenile salmonids sampled at the Red Bluff Diversion Dam are available at [http://www.fws.gov/redbluff/rbdd\\_biweekly.aspx](http://www.fws.gov/redbluff/rbdd_biweekly.aspx).

**Delta Fish Monitoring**

<b>Preliminary FWS Trawl and Seine Catch Report from 4/21/13 to 4/27/13</b>				
<b>Species*</b>	<b>Beach Seines</b>	<b>Mossdale Trawl**</b>	<b>Sacramento Trawl</b>	<b>Chippis Island Trawl</b>
CHNF	8		180	186
CHNLF				
CHNW				
CHNS	1		22	173
Spray Dyed CHN	1 (marked with pink lower caudal fin)			
Ad-Clipped CHN	1		38	150
SH				1
Ad-Clipped SH				
DSM				1 (77 mm, no expression)
LFS				2 (85 and 117 mm, no expression)
SPLT	22			6
*Chinook race based on length (Frank Fisher model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, SH = Steelhead, DSM=Delta smelt, LFS=Longfin smelt, SPLT = Splittail. Species are unmarked unless noted as adipose-fin clipped (ad-clipped) or spray dyed. Data subject to revision.				

\*\* From April to June, Mossdale trawls are being conducted by DFW (Region 4) and not by FWS. Based on preliminary data from DFW, 871 unmarked Chinook salmon were caught at the Mossdale trawls with an average fork length of 78.12 mm from 4/21 to 4/27. Outside of this total, DFW caught one Chinook salmon with suture and five Chinook salmon with antennae. In addition, DFW caught 3 unmarked steelhead with an average fork length of 227.67 mm during this reporting period.

The current seasonal catch (4/2 to 4/27) of unmarked Chinook salmon for the spring of 2013 is 2,795 and is the highest for this period when looking back at the data since the spring of 2005. The next highest catch for this period (4/2 to 4/27) was in the spring of 2007 where the seasonal catch was 1,257 and in the spring of 2012 where the seasonal catch was 1,230. This observation jives with the Stanislaus River Weir data from 2012, which showed that the adult fall-run Chinook salmon escapement was higher than what had been observed in the last 10 years.

Lastly, DFW conducted a Mossdale trawl efficiency test on 4/26 and released 5,000 juvenile Chinook salmon marked with a purple dorsal fin.

Information about the Delta fish monitoring data from FWS can also be found at <http://www.fws.gov/stockton/jfmp/>.

### **Salvage Monitoring**

<b>Preliminary DFW Salvage Report for Salmonids from 4/22/13 to 4/28/13</b>								
	<b>Central Valley Project (CVP)</b>				<b>State Water Project (SWP)</b>			
<b>Species</b>	<b>Adipose-Fin Clipped (Ad-Clipped)</b>		<b>Non-Adipose Fin Clipped (Non-Clipped)</b>		<b>Adipose-Fin Clipped (Ad-Clipped)</b>		<b>Non-Adipose Fin Clipped (Non-Clipped)</b>	
	<b>Salvage</b>	<b>Loss</b>	<b>Salvage</b>	<b>Loss</b>	<b>Salvage</b>	<b>Loss</b>	<b>Salvage</b>	<b>Loss</b>
CHNF			812	663			87	386
<b>Total to Date</b>	93	62	1,164	945	322	1,460	279	1,204
CHNLF								
<b>Total to Date</b>	165	118	28	18	616	2,780	57	260
CHNW								
<b>Total to Date</b>	67	53	129	98	120	542	142	633
CHNS			88	73			50	226
<b>Total to Date</b>			212	165			309	1,336
CHNU								
<b>Total to Date</b>			8	5				
SH	4	3	16	11	5	22	28	121
<b>Total to Date</b>	312	212	255	173	333	1,442	357	1,544
Notes: -Chinook race based on length (Delta model); CHNF=Fall run, CHNLF=Late-fall run, CHNW=Winter run, CHNS= Spring run, CHNU= Unknown race (Chinook greater than the length-at-date criteria), SH = Steelhead. -Salvage and loss estimates are rounded to the nearest whole fish. -Documentation on how to calculate salvage and Chinook loss can be found at <a href="ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/">ftp://ftp.delta.dfg.ca.gov/salvage/Salmon%20Loss%20Estimation/</a> . -Steelhead loss: SWP steelhead loss = salvage x 4.33 and CVP steelhead loss = salvage x 0.68. -Total to date is the total since 10/1/12 (the start of water year 2013). -Data subject to revision.								

<b>Preliminary DFW Salvage Report for Smelt and Other Species from 4/22/13 to 4/28/13</b>				
	<b>CVP</b>		<b>SWP</b>	
<b>Species</b>	<b>Salvage</b>	<b>Total to Date</b>	<b>Salvage</b>	<b>Total to Date</b>
DSM*	20	176	8	120
LFS**	52	187	24	44

SPLT		21		102
GST				
WST		4		6
Notes: -DSM=Delta smelt, LFS=Longfin smelt, SPLT = Splittail, GST=Green sturgeon, WST=White sturgeon. -Salvage estimates are rounded to the nearest whole fish. -Total to date is the total since 10/1/12 (the start of water year 2013). -Data subject to revision.				

\* No delta smelt <20 mm in fork length were reported in larval fish samples at the CVP fish facility. In comparison, delta smelt < 20 mm in fork length were reported in larval fish samples at the SWP fish facility during the period from 1500 hours on 4/18 to 0900 hours on 4/24.

Since the reporting period, there has been an increase in juvenile delta smelt salvage, especially at the SWP fish facility. This is not surprising due to the high water temperature at the Clifton Court Forebay. In the past, delta smelt salvage is typically high at the SWP fish facility when water temperatures are high at the Clifton Court Forebay.

\*\* Longfin smelt <20 mm in fork length were reported in larval fish samples at the CVP fish facility. In comparison, longfin smelt < 20 mm in fork length were reported in larval fish samples at the SWP fish facility during the period from 1500 hours on 4/18 to 0900 hours on 4/24.

Salvage information is posted on the salvage FTP site (<http://ftp.dfg.ca.gov/salvage/>). If you cannot access the FTP site, you can also go to <http://www.dfg.ca.gov/delta/apps/salvage/Default.aspx> and click on "Salvage FTP Site."

### **Smelt Monitoring**

20-mm Survey #4 was in the field from 4/22 to 4/25. Processing is currently 26% complete. DFW collected 41 delta smelt that ranged in size from 9 to 28 mm. Of this total, 30 were from the Sacramento River system and 11 were from the south and central Delta.

In addition, DFW collected 1,765 longfin smelt from 20-mm Survey #4 that ranged in size from 11 to 34 mm. Of this total, 1,160 were from the Sacramento River system, 21 were from the south and central Delta, and 584 were from Suisin Bay and westward.

DFW will begin 20-mm Survey #5 on 5/6. For more information about the 20-mm Survey, please visit the DFW website: <http://dfg.ca.gov/delta/projects.asp?ProjectID=20mm>.

Spring Kodiak Trawl #5 began on 4/29 and DFW should have the data to report by next week. For more information about the Spring Kodiak Trawl, please visit the DFW website: <http://dfg.ca.gov/delta/projects.asp?ProjectID=SKT>.

### **Smelt Working Group**

The Smelt Working Group met this past Monday (4/29) and agreed that current operations were protective of both delta smelt and longfin smelt. However, the Smelt Working Group will reconvene if Old and Middle River (OMR) flow becomes increasingly negative in the -2,500 cfs to -3,000 cfs range. This OMR flow range for reconvening is based on the recent data from 20-mm Survey #2 and #3 and the recent salvage trends, which showed that delta smelt larvae are still present in the south and central Delta and increasingly negative OMR flow may pose a risk to delta smelt larvae.

As of 4/30, the cumulative juvenile delta smelt salvage was 146, which exceeded the monthly April take limit of 20 at the Delta fish facilities. However, the Smelt Working Group considers the overall juvenile delta smelt take limit as a whole and 146 is a small fraction when compared to the seasonal take limit of 2,350. Therefore, the high salvage in April is not a huge concern and the monthly take limits are used more as guidance rather than as a hard limit.

The Smelt Working Group notes and FWS determinations are posted at [http://www.fws.gov/sfbaydelta/cvp-swp/smelt\\_working\\_group.cfm](http://www.fws.gov/sfbaydelta/cvp-swp/smelt_working_group.cfm).

### **Delta Operations for Salmonids and Sturgeon (DOSS) Working Group**

DOSS met this past Tuesday (4/30) and provided no advice to NMFS and WOMT, but provided an update on the status of implementing various NMFS RPAs that are currently in place. For NMFS RPA Action IV.2.1 (San Joaquin River inflow to export (I:E) ratio), DWR and Reclamation are currently operating exports based on a 1:1 I:E ratio since the water year type in the San Joaquin Valley is classified as critical and the San Joaquin River inflow at Vernalis is currently greater than 1,500 cfs. Therefore, the health and safety export level of 1,500 cfs does not apply. The I:E ratio for a critical water year type in the San Joaquin Valley is equivalent to a SWP/CVP export limit based on the Vernalis inflow in D-1641.

For NMFS RPA Action IV.2.3 (OMR flow management), DWR and Reclamation must operate to a five-day average OMR flow of no more negative than 25% of -3,500 cfs for exceeding the first stage steelhead trigger on 4/25. Day 1 of the action response began on 4/26 and extends for a minimum of five days and can be relaxed if no trigger is exceeded during the last 3 days of the action response. At the time of the DAT conference call, the first stage action response has not been satisfied yet and it appeared that DWR and Reclamation exceeded the second stage steelhead loss trigger on 5/1 based on preliminary data. This would require DWR and Reclamation to operate to a five-day average OMR flow of no more negative than 25% of -2,500 cfs for at least five days. However, the steelhead loss has not been confirmed by DFW yet and NMFS has not yet notified WOMT.

At the time of the DOSS conference call on 4/30, neither NMFS RPA Action IV.2.1 nor NMFS RPA Action IV.2.3 was controlling operations. DOSS notes are posted at <http://www.swr.noaa.gov/ocap/doss.htm>.

### **Operations**

Preliminary Summary for 5/2/13			
SWP		CVP	
Clifton Court Inflow (cfs)	500	Jones Pumping Plant (cfs)	3,200
SWP San Luis Reservoir Share (TAF) as of Midnight	429	CVP San Luis Reservoir Share (TAF) as of Midnight	675
San Luis Reservoir Total (TAF) as of Midnight	1,104	American – Nimbus Reservoir Releases (cfs)	1,000
Feather – Oroville Reservoir Releases (cfs)	4,000	Sacramento – Keswick Reservoir Releases (cfs)	11,000
DELTA OPERATIONS			
Outflow (cfs)	~11,600	14-day Average OMR Flow as of 5/1/13 (cfs)	-754
X2 (km)	>81	5-day Average OMR Flow as of 5/1/13(cfs)	-361
E/I (%)	22.1 (3-day average)		

After reviewing current operations, Wenli Yin and Andy Chu (DWR) responded to various questions about operations. The questions and responses from the conference call are below:

- What is currently controlling operations?
  - *Response:* Overall, water quality in the western Delta from the Bay-Delta standards of D-1641 is currently controlling operations. These water quality standards are based on electric conductivity (EC) at Emmaton on the Sacramento River and at Jersey Point on the San Joaquin River. With this standard, the 14-day average EC must be  $\leq 0.45$  mS/cm and the duration of this standard is based on water year type. Water year 2013 is dry; therefore, the  $\leq 0.45$  mS/cm EC standard will last from April 1 until June 15.

However, there are a number of factors that can control operations on a day to day basis. If specific to exports, then the combined exports of ~3,700 cfs at this time is more in line with the D-1641 SWP/CVP export limit based on the Vernalis inflow on a 3-day average.

- DWR and Reclamation exceeded the 14-day EC standard of  $\leq 0.45$  mS/cm at Emmaton. As of 5/1, the 14-day average EC at Emmaton is at 0.57 mS/cm. What is the reason for exceeding the standard?
  - *Response:* The EC standard at Emmaton was exceeded on 4/28 (Sunday) due to salt intrusion, and a rapid depletion rate in the Sacramento River watershed. To put things into perspective, the accretion rate in the Sacramento River (i.e., the additional water flowing into the river) was in the 2,000 to 3,000 cfs range about two week ago. In contrast, the depletion rate (i.e., the amount of water coming out of the water) went to -5,000 cfs just two days ago and there was not enough time to get the water into the Delta. To meet the EC standards, DWR and Reclamation have increased upstream reservoir releases.
- How much longer will the Oroville and Keswick reservoir releases remain elevated?
  - *Response:* Recently, the outflow has been in the ~10,000 cfs range and has stabilized the EC at Emmaton on a daily basis even though the 14-day average is  $>0.45$  mS/cm. At Keswick, there are currently no plans to reduce reservoir releases.

On the Oroville side, DWR has begun to reduce the reservoir releases in a slow quantity since about 4/30. Oroville reservoir releases went as high as 5,250 cfs over the past few days and have since been reduced.

- What is currently being done to maintain the 14-day EC standard at Jersey Point and likelihood of the standard being exceeded?
    - *Response:* DWR and Reclamation are watching the EC very closely at Jersey Point. All of the salt around Jersey Point is above 0.45 mS/cm, so there is a high possibility that the EC at Jersey Point might approach 0.45 mS/cm.
- In addition, we are currently in the last portion of the good tide. Once the tide starts turning around, there might be lower exports over the next few days if the EC increases at Jersey Point. There is not much that can be done at Jersey Point in terms of upstream releases. Moreover, the requirements for the Delta Cross Channel (DCC) gate closure is until May 20, so DWR and Reclamation do not have the luxury of the DCC gate to reduce EC.
- There is a scheduled maintenance at the SWP fish facility next week from Monday to Thursday that will shut down salvage operations and Banks pumping. How does this impact Clifton Court inflow?
    - *Response:* DWR still intends to take a small portion of the water from the Delta into the Clifton Court Forebay. Clifton Court inflow will be about 1,000 cfs during the planned shutdown.

A summary of daily operations can also be viewed at  
<http://www.water.ca.gov/swp/operationscontrol/docs/delta/deltaops.pdf>.

### **South Delta Temporary Barriers Project Status Update**

The first e-mail update of the season on the Temporary Barriers Project was sent out on 4/30, but there will be no agency representative from the Temporary Barriers Project on the DAT conference calls this year. Nonetheless, DAT will continue to review the e-mail updates on the conference calls. In summary, no rock or non-physical barrier will be constructed in the spring of 2013 at the Head of Old River and the construction of the agricultural barriers on the Middle River, Old River near Tracy, and Grant Line Canal have not yet started.

For more information about the Temporary Barriers Project, please visit  
[http://baydeltaoffice.water.ca.gov/sdb/tbp/index\\_tbp.cfm](http://baydeltaoffice.water.ca.gov/sdb/tbp/index_tbp.cfm).

**Next Conference Call:** The next DAT conference call is scheduled on 5/9 at 11:00 a.m. An e-mail update will be sent out before the conference call if an agency representative cannot call in.

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